

INTERNATIONAL SEARCH REPORT

International Application No

PCT/ -- 03/03197

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04B1/40

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04B H01P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02 37709 A (FUKAMACHI KEISUKE ;TAI HIROYUKI (JP); YOKOUCHI SATORU (JP); HITACH) 10 May 2002 (2002-05-10)	1-3,5-8, 10,11
A	-& EP 1 333 588 A (HITACHI METALS) 6 August 2003 (2003-08-06)	4,9 1-3,5-8, 10,11
E	abstract	4,9
A	page 2, line 44-51 page 3, line 6-56 page 6, line 16-58 page 7-8 page 10 page 11, line 1-37 page 12, line 24-58 page 13, line 1-17 page 15, line 6-58 page 16 page 17, column 1-10 figures 1-4,7,16-19,24-26,36-38 -/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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Date of the actual completion of the international search

31 October 2003

Date of mailing of the international search report

10/11/2003

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>EP 1 152 543 A (MATSUSHITA ELECTRIC IND CO LTD) 7 November 2001 (2001-11-07) abstract page 2, column 1, line 16-58 page 2, column 2, line 1-43 page 3, column 4 page 4, column 5, line 1-23 page 4, column 6 page 5, column 7 page 5, column 8, line 1-42 page 6, column 9, line 8-58 page 6, column 10 page 7, column 11-12 page 8, column 13 figures 1,2,4-11,14</p>	1-11

INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 03/03197

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0237709	A	10-05-2002	CN 1394391 T	29-01-2003
			EP 1333588 A1	06-08-2003
			WO 0237709 A1	10-05-2002
EP 1152543	A	07-11-2001	EP 1152543 A1	07-11-2001
			WO 0145285 A1	21-06-2001
			US 2002137471 A1	26-09-2002